

DLP

REFLECTION™ MBX-1

RUNCO INTERNATIONAL
DIGITAL LIGHT PROCESSING™



PFP™

3-CHIP DMD™ SYSTEM WITH DARK METAL PROCESS
ANAMORPHIC LENS OPTIONS
UP TO 5000 ANST LUMENS / 1100:1 CONTRAST RATIO
PFP™ CONTROLLER WITH VIVID™ PROCESSING INCLUDED



The World's Finest Home Theater Products™

The Amazing new Runco MBX-1 takes digital projection to a level of refinement and performance beyond reach, until now. This flagship product represents a technological watershed, incorporating engineering advances significantly beyond the heretofore state-of-the-art.

The MBX-1 utilizes a unique and revolutionary video processing system capable of actually duplicating the characteristics of film for the first time in a fixed-pixel digital projector. This is accomplished through specialized circuits that implement a 3-step process—pre-processing, decoding and optimizing film-originated signals; enhancing the dynamic range for maximum black level, contrast and detail reproduction without increasing noise levels; and post-processing that eliminates undesirable RGB characteristics associated with digital projection. Since film is not an RGB medium, this process is key to producing a film-like image.

With lens choice and anamorphic options, the MBX-1 can be tailored for use in virtually any home or electronic cinema environment and its tremendous light output is suitable for screens as large as 500" wide. The companion MBX-1 Controller outputs signals that are matched pixel-for-pixel with the native projector resolution, eliminating any video artifacts while faithfully processing input signals.



THE WORLD'S FINEST HOME THEATER PRODUCTS™

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FEATURES:

- Variable Light Output up to 5000 ANSI Lumens
- 3-Chip DLP™ System with New, Dark Metal Process Technology
- 1280 x 1024 Resolution
- Image Sizes up to 500" Wide

- Unique Processing System Designed to Accurately Reproduce the Look of Film
- Motorized Horizontal and Vertical Lens Shift
- Multiple Lens and Anamorphic Attachment Options

MBX-1 PROJECTOR SPECIFICATIONS:

Projector Type:	Digital Light Processing™ (DLP™), 3-chip, .9" DMD™—Dark Metal Process
Native Resolution:	1280 x 1024
Aspect Ratios:	Determined by supplied processor
Video Standards:	NTSC, PAL
DTV Compatibility:	480p, 720p, 1080i, 1080p
Scan Frequency:	Horizontal: 15–107 KHz Vertical: 24–120 Hz
Picture Size:	Recommended Width: 120–360 in. Maximum Width: 500 in.
Lens Options (2)/ Throw Distance: (Factor x Screen Width):	Lens Option A: Zoom Short Throw 2.0–3.45:1 Lens Option B: Zoom Long Throw 3.45–5.50:1 (Throw distances specified with 16:9 aspect ratio and 1.42 Anamorphic Cinema Lens Attachment) Contact Runco Technical Sales Support for custom lens options and specifications
Anamorphic Options (2):	1.42 Anamorphic Cinema Attachment 1.90 Anamorphic Cinema Attachment
Horizontal and Vertical Shift:	Horizontal offset varies per lens, up to 30% Vertical offset varies per lens, up to 38%; Built in Lens Shutter; Motorized horizontal/vertical lens shift
Light Output:	4300–5000 ANSI lumens* (Depending on lamp wattage output adjustment setting. Full light output at 200–240V) <u>CSMS** Specifications:</u> Home Theater Calibration: 3890 ANSI Lumens 35 Foot-Lamberts (fL)

Contrast Ratio:	1100:1 <u>CSMS** Contrast Ratio: 122:1</u>
Lamp:	1.0 KW Maximum Bubble Type Short Arc Xenon Lamp; 600-1000W Infinitely Variable Adjustment; Built-in: Overheat Protection, Lamp Over-usage Protection
Lamp Life:	1500 hours @ 6500° Kelvin
Inputs:	<u>Projector:</u> (2) 5-BNC RGB/Component, (1) DVI w/HDCP, (2) RS-232 In/Out <u>Controller:</u> (1) Composite, (1) S-Video, (1) Component, and (1) Pass-through
Memories:	100 individual memory locations, PCMCIA Data Back-up
12V Output:	See Controller for Specifications
Power Requirements:	100–240V AC, 50/60 Hz, 1.1kW at 120V, 1.5kW at 240W
Operating Environment:	40°–95° F (5°–35° C), 20%–80% humidity (non-condensing)
Dimensions (w/out feet):	Width: 26 5/8 in. (676.3 mm) Depth: 33 1/8 in. (841.4 mm) Height: 13 1/4 in. (336.5 mm) Weight: 203 lbs. (92.3 kg) (w/both lenses)
Regulatory Approvals:	UL, FCC Class A, CE, C-Tick

CONTROLLER SPECIFICATIONS (Included with the MBX-1):

Aspect Ratios:	Anamorphic, Letterbox, 4:3 (on either 16:9 or 4:3 screens)	Bandwidth:	Video inputs: 5.5 Mhz, Pass-through: 100 Mhz
Input Standards:	NTSC/PAL	Power Requirements:	100–240V AC (auto sensing) 50/60 Hz, 15W
Outputs:	Native Resolution: 1024p; HD Pass-through: Up to 1080p	Operating Environments:	41°–95° F, (5°–35° C), 0%–90% Humidity (non-condensing)
Inputs:	(1) Composite, (1) S-Video, (1) Component, (1) Pass-through	Dimensions (w/out feet):	Width: 17 1/2 in. (444.50 mm), Depth: 16 in. (406.40 mm), Height: 3 1/2 in. (88.90 mm), Weight: 16 lbs. (7.3 kg)
Control Options:	Infrared (with discrete on/off, aspect ratio and source selection), RS-232, and Front Panel	Included Accessories:	Rack mounting brackets
Screen Trigger/ Masking Outputs:	(2) 12V DC, 1/8A	Regulatory Approvals:	Complies with FCC Class B, CE, C-Tick
		Warranty:	(1) One year parts and labor from the date of delivery to the end user

*ANSI Lumen specification: This is the typical projector luminosity (brightness) specification found in most sales literature. This measurement is included in RUNCO literature to allow for direct comparison with other manufacturer's projectors. These measurements can be taken at 9,000 to 13,000° Kelvin to get expected performance data when the projector is used in professional, commercial, and industrial displays.

**CSMS Home Theater Calibration ANSI Lumen Specification: These measurements are taken from the projector as set up in a home theater environment. The projector is calibrated to ISF specifications including setting the color temperature to 6500° Kelvin, the standard for reproducing video.

**CSMS Home Theater Calibration foot-Lambert (fL) Specification: This is the unit of measurement used in commercial movie theaters to express image brightness. The Society of Motion Picture and Television Engineers (SMPTE) specifies 16 fL as the target image brightness for film-based projectors using an open gate (without film in the projector). More importantly, today SMPTE specifies 12 fL as the target image brightness in Digital Cinema theaters using DLP™ technology. The foot-Lambert is dependant on screen size, screen gain, and projector light output.

All measurements are made at RUNCO to ANSI/NAPM IT7.228-1997 specifications using the Photo Research PR-650 SpectraColorimeter and Minolta LS-100 Luminance Meter, Video Essentials test DVD, and a Da-Lite 1.0 gain, 120-inch wide screen. The projector is calibrated to a color temperature of 6500° Kelvin and has a minimum of 150 hours of usage.